

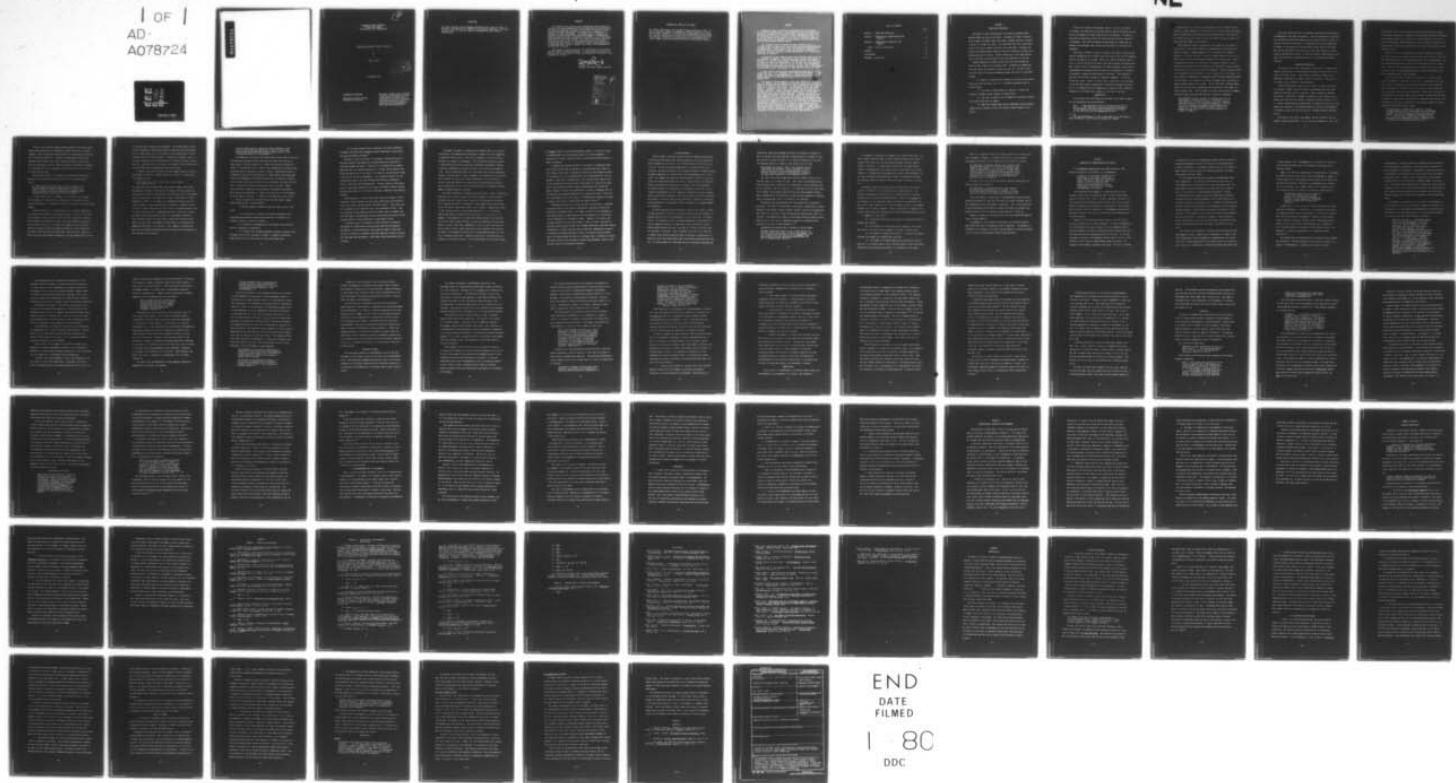
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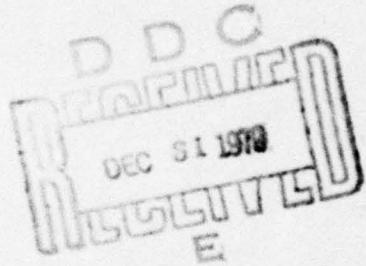
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STRATEGIC STUDIES INSTITUTE
US ARMY WAR COLLEGE
Carlisle Barracks, Pennsylvania

FORECASTING STRATEGIC ISSUES, 1980-2000

by

John F. Scott



10 December 1979

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FOREWORD

The author of this special report contends that many forecasts of interest to military planners fall between conventional research methods. He proposes an approach to studies of the future of conflict in international relations which adopts the argument form of composition as a technique of issues development. A strategic issue is defined as a question of policy raised by an expected development in international relations which could have consequences detrimental to the United States, which admits to more than one way to influence it favorably, and which logically includes the use of force among those ways of influence. Illustrations and examples of searching for future issues, and methods of explaining them, include a lengthy case study of interdependence in international relations.

This special report was prepared as a contribution to the field of national security research and study. As such, it does not reflect the official view of the Army War College, the Department of the Army, or the Department of Defense.

Andrew C. Remson, Jr.
ANDREW C. REMSON, JR.
Colonel, CE
Director, Strategic Studies Institute

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BIOGRAPHICAL SKETCH OF THE AUTHOR

MR. JOHN F. SCOTT came to the Strategic Studies Institute in 1963. He holds a bachelor's degree in commerce and finance from Wilkes College and a master's degree in social science from Shippensburg State College. Mr. Scott has contributed to several Army studies on nuclear deterrence and strategy. He has written several articles on the application of social science to national security problems in professional journals.

SUMMARY

Planning is based on some set of assumptions about the future. The methods and methodology of forecasting are useful and efficient for looking at the biggest picture of the future--alternative worlds--and for estimating the course of rather specific technological trends. But an area of interest to military planners falls in the middle range of forecasting, that vast wasteland of international relations which still seems to resist methodological attacks.

This slippery field of interest includes strategic issues. A strategic issue is a question of policy raised by an expected development in international relations which could have consequences detrimental to the United States, which admits to more than one way to influence it favorably, and which logically includes the potential use of force among those ways of influence.

One approach toward grappling with future strategic issues is to use the technique of argument. This approach simply accepts any plausible forecast as a starting point, makes assumptions explicit, and reports on or creates at least one counterthesis. In this way, the policy choices the forecast might raise should be clearer in terms of the consequences of being right or wrong about expectations, and, the terms of the argument could sometimes reveal developments we might otherwise have overlooked.

A case study of international interdependence finds that no strong theory backs any of the contending theses about interdependence. To some extent, the future of interdependence is a problem for national strategy because degrees of interdependence depend on what nations want those degrees to be.

The argument approach suggests, first, that studies at a conceptual level are probably too far removed from specific forecasts of conflict to permit us to draw conclusions about if, when, and where the Army might be called on to operate in the future. But conceptual studies are, nevertheless, a worthwhile first step to develop the political context of possible conflicts. Second, conceptual studies with an issues approach can probably deal with strategic suppositions because the latter are generalities and similar to broad concepts. Strategic suppositions are those supposed "lessons" such as the domino theory and the Munich syndrome which lurk in strategic studies and often go unquestioned in spite of their weak foundations. Third, the issues approach has potential for uncovering new insights about the future, but it allows this only through stimulating the analyst--it is not a feature of the approach itself. Finally, the issues approach does nothing to simplify the complicated and complex field of conflict in international affairs. Indeed, the idea that every potential development can be argued about implies that the complexity of the topic is one of its more real characteristics.

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CHAPTER 1

METHOD AND METHODOLOGY

This paper is about forecasting for the purpose of making today's decisions about the Army of the future. Forecasts are kinds of expectations of what will happen, what can be made to happen, and how to prepare to adjust to or shape the future. The Army Staff deals with expectations in any of its work intended to develop forces and plans. Resources and plans on the drawing boards today are based, by definition, on some set of assumptions about the future. Futures studies are no more than explicit ways to deal with a future which is dealt with implicitly in any case.

Annual Department of Defense reports spell out the strategy and forces we shall require in the coming years. Although some assumptions about the future are explicitly stated, most are not. We can at least note here some of the obvious assumptions about the future in recent DOD reports:

- (1) NATO will continue as an alliance of the West and the United States will have an active role in it, including stationing forces in Western Europe.
- (2) The threat to NATO Europe will continue to require the presence of theater nuclear weapons in Western Europe.
- (3) The kinds of possible war in Europe will continue to include those which could last for months.
- (4) NATO allies which today lack an independent nuclear weapons capability will continue to rely on US nuclear weapons support in the future.

These are not unusual expectations; that is, we tend to take them for granted, and indeed they are solidly based in current government policies and the environments for which those policies are designed. The point is that they are expectations about the future and none of them is natural or foreordained. Each could be debated as being subject to change and, if changed, would influence what and how the Army plans for its forces and strategies.

This paper is largely a study of looking at the future to come up with explicit assumptions, any of which, given the state of the "art" of futurism, could be as wrong as it is right. There is no lack of forecasts; what we lack is a way to know which are better than others and what the better ones mean. After a review of methodology* for futures research, a case study of interdependence in international relations will be presented to illustrate an approach to judging and making sense of forecasts. This approach is what shall be called an "issues" or "argument" technique. It does not "solve" the future. Rather, its only claim to usefulness is an insistence on the idea that trying to understand how forecast environments work will give us a systematic basis for judging their reliability and a plausible foundation for inferring their meaning for the tasks of the Army.

PERSPECTIVES

The questions about the future most pertinent to the Army are about war, its prevention, and its prosecution.

Wars . . . must sometimes be our lot; and all the wise can do, will be to avoid that half of them which would be produced by our own follies, and our own acts of injustice; and to make for the other half the best preparations we can.¹

*The term "methodology" is used in this paper in its pure sense--a study of method(s), rather than as a synonym for "method."

Interest would then be focused on the questions of (1) will Army forces be directed to fight somewhere in the world? (2) if so, where, when, and against whom? (3) what will the political and military objectives be? (4) what can the Army do to deter such wars? (5) and, how should the Army be prepared to fight wars which might not be deterred?

These questions would not necessarily be the same for the armies of other nations. The United States has no neighborhood threats--we have no reasons to expect to aggress against or to be attacked by our American neighbors. Currently, we have no reasons to expect domestic violence of a degree which would require military assistance in restoring order. Rather, the geographical missions of interest to the Army are external to North America and associated with the interests of a "superpower" whose worldwide involvements are not tied to colonial involvements. These stipulations make it both easier and more difficult to look for Army roles in the future. On the one hand, a superpower is a superpower and is involved sometimes whether or not it wants to be--because it is there or because people involved in a dispute suspect that it will be there. On the other hand, interests which might lead to US military intervention have no pattern as they might for a former colonial power. Interest might come from a constellation of changes and events rather than from some doctrine or policy or commitment.

The fundamental question of American interests and power is never posed or answered directly or in the abstract. It is posed implicitly in terms of a number of specific immediate issues and decisions; it is answered ambiguously, if at all, by a set of responses that emerge from the unpredictable interaction of external events and domestic politics, of general policies and particular underlying premises and pragmatic judgments.²

While such views might seem to discourage forecasting for the purposes of preparedness, they imply the opposite. They are saying that in the short run, decisions and actions are based in part on what resources we chose in the past to have for the present. In opposition, the long run means time to change. We can predict for the long run no better than for the short what our own decisions will be, but we will have the "leisure" to look at potential problems more closely. In the next section, methodology for looking at the long run is reviewed with an eye to its usefulness for Army planning.

FORECASTING METHODOLOGY

The search for the future once seemed to have about it a passion for romantic visions which, as with childhood innocence, has been lost to the allure of a mature science. That science is colorless, rational, and demanding of explanation of things as they are or must be. The glory of the flower is now a function of photosynthesis.

Utopian and dystopian fancies were not meant, of course, to be taken as forecasts. Rather, they were promises and warnings about what could become from the moral uplift or decline of their contemporary audience. The visions of the biblical prophets are among the oldest examples, even though they dealt with the personal, inevitable spiritual future of all of us. Today's scientifically studied futures are temporal, mostly of our own making and, therefore, all the more pressing on our social consciousness. A prodigal son there can still be, but not a prodigal society--time does run out.

Both paths to the future, the romantic and the scientific, have in common an implied exhortation: do, or do not do, something, or else! Why

else bother to look? Yet, the older visionaries were unafraid to grope in the dark; the scientific futurists look only where the light is brightest. This contrast is seen in the old story of a man looking for a lost coin under a street lamp. When asked where he lost the money, he pointed up the dark street; he said he was looking under the street lamp because he could see better there.

This is to say that through modern scientific methods, we probably have some very good ideas about certain outlines and contours of the future. But these expectations are "overdetermined"³ and often uninteresting. They are overdetermined because we have more evidence than we need to support them. Some are uninteresting because they are what we can see, not what we want to know. The widening gap between rich and poor nations is now only interesting when it stops widening.

All of what we think we know or can know about the future is the result of inference. There are no "facts" yet. Consequently, any scientific--that is, systematic and replicable--method for saying something about the future is "scientific" only in the sense of what it does with past and present facts and other information. Debate about the worth of a scientific method must be debate about how well the method was followed, and about the logical rigor of the inferences made about the future. The philosophical and practical pitfalls of any scientific method of futures research are fairly well known. First,

The philosopher or scientist who thinks he can freeze our human existence into a system does so by substituting a pallid and abstract concept for the living and concrete reality. Life is lived forward and understood backward. . . . If we were ever to understand it completely, we would have to be already dead, without a future and with no untried and novel possibilities before us.⁴

This is to say that when inexact sciences abstract from reality something is missing and what is missing may be what we need for true understanding. This old objection has been placed on a philosophical shelf and only occasionally dusted off. Instead, we acknowledge the limits and imperfections of models while still claiming that many of them do have practical usefulness. We don't always need perfect information; sometimes it is satisfactory for our purposes to know if prices will rise or fall, not their precise level.

The practical pitfalls of systematic and replicable techniques and methods can be illustrated with this reference to one methodological device:

Dr. Amron Katz has said that the trouble with charts is that one can present only data on them, usually in the form of numbers, and that therefore the motivation to produce charts tends to become an incentive to gather data because of their availability rather than because of their relevance.⁵

In other words, there is a tendency to look under the street lamp. But once again, if limitations are recognized, only that much validity should be ascribed to a finding from "scientific" methods as good sense would suggest.

Intuition, whether it is called inspiration or creative imagination, is a popular and legitimate forecasting technique. Since it is not replicable, however, it is not likely to have the status of scientific methods. With systematic approaches, we at least have some standards to judge how much confidence to place in a forecast (for example, we can review the explicated research to find the biases; see that all of the "steps" were followed; double check facts, and the like). With intuition, however, we have nothing more than seeing an affinity to our own predelections or a bow

in the direction of expertise and authority. We can never know if solid, logical processes of thought were followed in the intuiting of a forecast or if it came "right out of the old guts onto the goddam paper."⁶ Nevertheless, with all of these obstacles to winning our confidence, intuition can have a valuable place in forecasting if its products are put to their best use. This best use is, in a sense, the purpose of the technique which will be followed in the substantive parts of this paper.

Scientific and intuitive methods have the common purpose of trying to give shape to a world too complex otherwise to conceive. In this sense, forecasting is an art:

Life is very nice, but it lacks form. It's the aim of art to give it some.⁷

The higher the level of abstraction from concrete things, and the more encompassing of things is the concept, the greater the need to give form. Dealing with concepts in international relations comes close to the highest levels of abstraction. One cannot see or feel a "bipolarity" or "interdependence," (which, in the jargon of the behavioral sciences, are relational concepts). Those concepts refer, of course, to things and operations which compose them, but the concept always is something greater than its parts, just as a house is something more than a collection of bricks. Any method for forecasting which claims to be thoroughly scientific or purely inductive should be suspect when it deals with concepts because there is no way to get from things to concept which can claim more than imagination and logic as its rationale. And, compared to studying the past, even the things and operations which are facts are only suppositions when they are "in" the future.

If we are faced with two conflicting opinions regarding a past event, we try to determine which one is true; if we are faced with two conflicting opinions regarding a future event, we try to determine which one is more plausible.⁸

In dealing with the near or the distant future--where facts in use with the former may seem more reliable than with the latter--the only use of known "facta is as raw materials out of which the mind makes estimates of futura."⁹ The question, then, of the relative plausibility of opinions about the future begs for evaluative criteria. However, establishing criteria of plausibility and then using plausibility to judge between conflicting opinions risks encouraging a stultifying conservatism in forecasting. Whoever sticks closest to the facts would be the most plausible, and surely the most dull. Not that the forecaster should take leave of the facts; rather, facts should be a launching pad for otherwise free-soaring speculations about what we are interested in. Indeed, the first test of a good forecast is its relevance to the user. It should at the least cause him to think.

One set of criteria for a good forecast is worth noting. Thomas Milburn proposes that a forecast should:

- (1) contain adequate information about the current state of the world;
- (2) it should use all available scientific knowledge we have concerning causal principles which can explain why, if condition A is presumed to exist, it leads to or causes B;
- (3) it should be multidimensional (and therefore more realistic about the complexity of conditions);
- (4) it should allow for much complexity, quantity, problems, rates of change, and the like, and employ "glimmers" of possible innovations rather than rely only on what seem to be more sure things; and

(5) it should exploit social, political, and similar indicators of change to provide useful information bases along which to make projections and seek causal relations.¹⁰

Criteria (3) and (4) are most in the nature of dictates and seem to come from Milburn's experience with forecasts which have successfully stimulated thought and action. Criterion (2) is perhaps the one against which most national security forecasts sin. We have little patience with theory and want to get to the "meat" of a study--burying theoretical essays in the back of the book as appendices. Yet, forecasts having to do with international conflict are shot through with theoretical assumptions (that is, cause and effect propositions). Various versions of the domino theory or the Munich syndrome dot the pages of strategic studies although the theory has almost no, or at best a very weak, foundation from empirical research.

Partly because of a lack of good theory and partly because of their complexity, those futuribles we know almost nothing about are beyond the loom of the street lamp and include "strategic issues." These issues are, in the pantheon of the futurist's gods, the intermediate deities. They are conditions in what might be called the middle range of knowing, that vast wasteland of international relations stuck between alternative worlds forecasts and the linear projections of technological trends.

A strategic issue is a question of policy raised by an expected development in international relations which could have consequences detrimental to the United States, which logically admits to more than one way to influence it favorably, and which logically includes the potential deployment and employment of land combat forces among those ways of influence.

"Strategic" can apply to future security issues in most of its several connotations. The meanings most appropriate, however, are those suggesting an important turning point or event and the presence of conflict in which military force might be instrumental. The turning point meaning is typical of some British historical writing which identifies "strategical" battles, those which subsequently had great influence on the course and outcome of a war. Future studies must adopt this connotation with caution and modesty because it has been used to place a judgment on the importance of past events which unfolded to reveal their future significance. The connotation of military force and conflict is a conventional distinction which serves to place concentration on the role of the military and to distinguish strategic games and debates from real conflicts.

The event, development, condition must raise a policy issue. Intuitively, what most easily comes to mind is the decision whether to intervene with military force in a crisis or war. This kind of policy may be too narrow but it does go the heart of the matter for land combat forces and can stand as the core idea of what kind of policy is of interest. Semantically, policy in this context involves a "conditional imperative." It is a decision usually made before an expected event that says, if A occurs, do B. For example, if the Warsaw Pact's forces attack Western Europe, stop them with the forces we have already deployed to Europe plus additional forces we will deploy in crisis. Most other commitments of force are much less clear and nations often, at best, signal with public policy statements that they are inclined or are leaning in the direction of doing something dramatic to control or forestall some crisis. American intentions in the Middle East are currently of this kind of policy. For forecasts which look for policy issues

that might require US military intervention, however, it should be enough to establish that such intervention seems to be a good probability. Certainty is too much to hope for since we could not even predict what we might do tomorrow.

To complete the parsing of policy, it is usually a conditional imperative about an event that is expected to occur more than once (which, in this context, could apply to the general class of policies under the rubric of "intervention"); it is something which can be substituted for, that is, changed; it must have a relevant public; the relevant public must be told of the intention of the policy (the relevant public in terms of this paper may be other nations in which we might intervene and other nations who might intervene to oppose our intervention); it must be something that can be done when the precedent conditions of the imperative apply; it must fulfill some aimed-at goal; and, doing it or announcing the intention of doing it must be seen as able to bring about the ends of policy.¹¹

Intervention policy is at a very high level of abstraction. Strategic issues can involve lower levels of abstraction, especially as these are derivative from higher levels. For example, "policy" on the employment of some weapons types in combat derives from the assumption of a policy decision to intervene or be involved in combat. However, it is obvious that strategic issues can in this way be made to cover too much, every kind of national security choice in fact, and, meaning everything, would mean nothing. Consequently, to assure that the issues covered are comprehensive enough to be substance for deductions about a variety of national security requirements, we should confine the idea of a strategic issue to problems of central war and to policy on the intention to deploy, the deployment, and use of US military forces in international conflicts.

AN ISSUES APPROACH

Several popular conceptual forecasts about the shape of international relations have the quality that they are debatable not only on grounds of their plausibility, but also as to the inferences they allow for the role of force. The rise and relative importance of the Pacific Basin in US interests, nuclear proliferation, the superpower potential of Western Europe, worldwide competition for raw materials, and interdependence are a few of these. For example, the degree of interdependence is debated in the literature, with some views holding that it is a concept without real substance. However, even when two opinions are in agreement about interdependence, the opinion-holders can disagree about its meaning for the role of force. Economic interdependence in its "classical" conception was seen to promote peaceful inter-nation relations. But now this idea is seriously questioned and, indeed, it could be said that the plurality of opinions is that growing interdependence could promote conflict as readily as it counsels peaceful cooperation.

An issues approach leaves the forecast events to the doings of current forecasting methods, accepts the forecasts provisionally, and attempts to analyze each event for its potentialities as one or as a set of strategic issues. As an approach, then, the issues perspective is opportunistic--it does not generate forecasts; it uses them. But it can also be called a method because another function it can have is to extract forecasts from the forecasts it critiques. This is somewhat like the "on the shoulders of giants" where honored scientists point to the work of predecessors on which they built and without which they could not have discovered what they did. An issues method is no more than the use of cumulative knowledge and

speculation, using that knowledge critically to see where it succeeds or fails to explain, and then using this learning process to forecast in turn. This process is similar in spirit to one used by researchers at the Stanford Research Institute's Center for the Study of Social Policy.

New problems may often be found in the junctures and overlaps between old problems. The new problems will not be found in the current crisis gripping national or international attention, but may be discovered by looking for the long term consequences of that momentary crisis.¹²

The first step beyond recognizing potential strategic issues in any forecast event is to "create" an issue. More likely, any expected development with this kind of potential will already have solicited opposing views in the literature. But if it has not, or if opposing views are no more than testy tirades, the researcher should develop the counterarguments himself. This is decidedly not an invitation to create the mere appearance of balance; every view should have merit or it should be left uncreated.

Existing or developed opposing views can contend with a forecast at two levels. The first is on the basis of the overall plausibility or reasonableness of the forecast (using, perhaps, Milburn's criteria of plausibility). The second is on the basis of the presuppositions supporting the logic of a forecast. A presupposition "denotes an underlying proposition whose posited (which is not to say false or unwarranted) quality is recognized quite ¹³unclearly, if at all, by those holding it."

Arguing about presuppositions is valuable in itself because,

Strategic suppositions seem to serve a vital function in the very process that results in their being changed. Even if for long periods they have an almost a priori status, they ultimately provide the backdrop against which the need for change becomes apparent.¹⁴

For example, an hypothetical statement in a forecast might read: if, then, country X will be unable to resist external pressure from country Y, country Y will follow its success by applying similar pressure against country Z, and so on. In other words, connotations of a domino theory compose a presupposition about cause and effect which might well be questionable as a working theory and questioned as well on other grounds: why is Z seen as equally as vulnerable as X? Which circumstances in X and Z are different, which are similar? Why would Y want to pressure Z as well as X?

Although a thesis vs antithesis approach sounds like a dialectical process, it should not be seen that way in the issues approach. The dialectic presupposes that there will be a synthesis which is, somehow, the better part of both thesis and antithesis. There is no a priori reason, however, for supposing that either the thesis or its opposition are less correct than a synthesis (viz., she is pregnant vs she is not pregnant; therefore, she is partly pregnant). Rather, the purpose of argument is to discover implications and consequences of interest resulting from both views.

To summarize at this point:

- (1) An issues perspective on forecasts and forecasting is both an approach and a method.
- (2) As an approach it is no more than an attempt to see a forecast event as an issue, with an opposing or at least a contrary view.
- (3) As a method, it exploits an issue's opposing sides to generate forecasts which might not otherwise have been seen.
- (4) The purpose of an issues approach is a function of the perspective of the research agency and the approach seeks to select and explain implications and consequences pertinent to the mission of that agency.

There is no suggestion here that an issues approach is a tight, rigorously systematic technique. To repeat, its aim is to uncover relevant developments and events, not to impress with its scientific orthodoxy.

We look ahead, not for its own sake, but in order to give ourselves some standards by which we can illuminate the biases of the present. . . . The act of pursuing these ends has important intangible benefits. It makes all of us more sensitive to the relationship between what we are doing and where we are going, and it also gives us some sense that we are operating in a universe that is not entirely beyond our control.¹⁵

Even more to the point is the idea that we can get carried away with method and miss our objectives.

Am I focusing on an important problem? Am I learning anything by following this train of thought? If you do not ask questions like these, you simply do not know what you are doing, and no methodology can help you.¹⁶

In the next chapter, a case study of interdependence using the issues approach and method will show that the results of issues "thinking" look to be as pedestrian as any other brand of exposition. This is as it should be. A self-consciousness with method in exposing the results of research only detracts from its value for seeing a complex world as it really is.

Chapter 3 consists of conclusions about the issues method and approach used to develop Chapter 2.

The Appendix to this study is an adventure into forecasting developments which have poor or nonexistent factual foundations. The Appendix is intended to be an example of an issues approach applied to possible problems to see if they are worth greater research time and effort.

CHAPTER 2
INTERNATIONAL INTERDEPENDENCE AND CONFLICT

In The Communist Manifesto Marx and Engels announced, with apparent satisfaction, the arrival of interdependence.

In place of the old wants, satisfied by the productions of the country, we find new wants, requiring for their satisfaction the products of distant lands and climes. In place of the old local and national seclusion and self-sufficiency, we have intercourse in every direction, universal interdependence of nations.¹

This remarkably bland passage in an essay spiced with fiery metaphors states correctly enough one aspect of 19th century international relations--that contact, exchange, awareness, sensitivity to the outside world were growing in many nations. But to see the development as "universal" was prediction, not description. We have then not only one of the first labellings of interdependence placed on the relations of states, but also one of the first of the exaggerations of those relations.

Leaders in the developing economies, both in the 19th century and now, probably would not agree with Marx.² To them, interdependence is a culture-bound term--one is tempted to say a euphemism--used by the more prosperous economies for describing their relations with each other and with the less prosperous nations of the world. To say that the world of nations is interdependent implies that we are all in this together, that we share the same problems, hopes, and fears. The reasons for this semantic opposition come later. For now it is enough

to say that one's view of interdependence rests on where one sits on a dependence-independence scale, on the stage of the viewing nation's economic development, on its aspirations about what kind of economy it wants compared to what it gets from outside influences, and similar reflections of national values.

In its simplest and most useful meaning, interdependence means mutual sensitivity.³ The actions and decisions of one actor in a relationship affects others and he is in turn affected by them. The psychological concept from which the term may derive or at least to which it is analogous is a love-marriage relationship. A mature love-marriage produces mutual trust and a letting down of barriers--those psychological defense mechanisms we all to some extent put up to protect ourselves from emotional harm. Lowering the barriers allows the most deep and fulfilling kind of relationship, but it also permits the most exposure to harm--allows the greatest vulnerability to the loved one. "You always hurt the one you love" was written by someone who beat Erich Fromm to the punch on insights. Indeed, because a mature relationship is so close, with keen mutual vulnerability, harm is done even unintentionally by any lapse of consideration for the other.

The economic interdependence of nations reaches nothing like this psychological extreme. Complete mutual dependence is a model at best which dramatizes the mixed dependencies, independencies, and vulnerabilities of various degrees felt by all nations about their relations with others. For the most part, analysts and economic historians seem

to agree, however, that interdependence as a coverall term characterizes the most pervasive form of relationship of the modern international economy.

What it is, then, is a hodge podge of varying degrees of dependence, the general situation being international interdependence. Why it is is more important for forecasting because we shall want to know if the necessary and sufficient conditions of interdependence can continue into the long range future. What it means, if it continues or not, for national security is, finally, the reason for asking about it.

The important issue of the relationship of economic interdependence and national security is an old one and has engaged the attention of many thinkers and conflicting schools of thought over the past three centuries.⁴

Looking back a century or two has distinct advantages for understanding interdependence. Today we are, as the man who discovered he had long been writing prose, so accustomed to it that we can overlook what is different about interdependence compared to other possible forms of economic relations. Perhaps the most surprisingly obvious aspect of it is that "economic interdependence is a consequence of one of the most distinctive features of modern history, namely, the emergence of a market exchange system for organizing economic relations."⁵

But markets have two qualities which are relative--their openness and competition. The more pronounced each of these, the greater the degree of interdependence. Currently, the nature of economic

interdependence is changing toward less openness and less competition and more government intervention. Most likely this is because one major determinant of openness is disappearing--a dominant world power, a role played by Great Britain in the 19th century and by the United States after WW II. That is to say, cooperation in an open market exchange system could be enforced by a dominant power so inclined to do so. The United States today may lack the power and the inclination. The American "style" has not been heavy handed; it has instead led the world economy through international institutions such as the International Monetary Fund and the General Agreement on Tariffs and Trade (GATT).

As economies (or economic blocs) come closer to being equal in their abilities to influence international commerce and finance, the continuation of an open market system depends more on each seeing its self-interests best served by openness. But it may not be "natural" for nations to see their self-interests in this way.

Other than in a few . . . exceptional circumstances, societies throughout history have placed much greater emphasis on security values such as social stability or self-sufficiency than on income gains from the free operation of markets. For these reasons, it should be apparent that societies freely enter into extensive market relations only when the perceived gains are much greater than the perceived costs or when market relations are forced upon them by a superior society. . . . The champions of an interdependent world market economy have been politically the most powerful and economically the most efficient nations. Both elements, hegemony and efficiency, are necessary The two great champions of market systems in the modern world have been Great Britain in the nineteenth century and the United States in the twentieth.⁶

The remaining historically explanatory conditions of interdependence are also changing. The modern nation-state system is, of course, intact but more complicated, in economic terms, by the development of blocs such as the European Economic Community (EEC). In terms of relative openness versus protectionism, a bloc can be seen as a large nation-economy which will adopt policies toward the outside world that protect its member states from unwanted competition.⁷

The "political supremacy" of the middle class initially was a strong force for openness and competition. This influence is now changing in favor of what are commonly called interest groups--labor, farmers, producers, consumers, and the like--who, unlike the middle class entrepreneurs of the 19th century, do not necessarily see their best interests served by open competition in world markets.⁸

The technological revolution in communications, transportation, and mass production continues to stimulate world commerce. The new wrinkle is an energy-hungry advanced industrial world whose raw material needs, especially oil, place it in a vulnerable position to traditionally weaker oil-rich economies.

This, briefly, and too simply, is the face of economic interdependence in terms of explanatory conditions. The conditions are manifested in an open market exchange system which, if it is very open and very competitive, is synonymous with interdependence.

Currently, the latest harbinger of more or less openness will be the results of recent GATT negotiations. Reportedly, this latest round of negotiations was a move against increasing trade restrictions

taken by several major economies over the last few years.⁹ Governments had introduced a number of nontariff restrictions, some of which are quite subtle, to restrict imports. These restrictions include quotas, government subsidies to private firms, and government purchasing practices ("buy American"). However, there is some sense of walking against the tide in fighting this new protectionism.

There is simply no doubt that the recent protectionist trend is closely related to interventionist policies of the modern industrial state and will not entirely disappear with more satisfactory [economic] conditions.¹⁰

Robert Bowie has given a rundown of the forces which impel the state toward protectionism. As the result of industrialization, urbanization, and rapid change, states have become more responsible for the welfare of their citizens. But the capacity for national governments to fill these responsibilities is eroded by interdependence which makes economies and societies vulnerable to external forces. "Thus, foreign affairs become deeply enmeshed in domestic politics and affect the ability of leaders to meet the expectations of the electorate." Almost all societies are experiencing popular discontent or disillusion; the strains of mobility and urban life, and the bigness of business, unions, and government make for anonymity, resentment, and feelings of no influence on one's own life. These feelings, says Bowie, run counter to demands for interdependence and its alleged benefits.¹¹

The debate about interdependence is about emphasis, importance, perspective, and meaning. For example:

The most pervasive feature in shaping international relations in the coming decades will be growing interdependence of societies and nations and their reactions to that interdependence.¹²

This is the conclusion of one Commission study that is rejected by other students of international relations presumably because it "unrealistically" raises economic relations to a deterministic status while playing down the traditional nation-state model of international relations. This is to say that many of the features and implications of interdependence are as well explained by the state-centric model. If this seems like six of one and a half dozen of the other, it is, but the detractors have a key point. This is that the economic interdependence or transnational relations model of the world misleads by encouraging inferences that the state is becoming less important and less influential in international affairs compared to economic factors manipulated in the open market by the likes of multinational corporations, and, in some cases, by the state itself. This opposing school would argue that while the importance of economics is undeniable, the state still has the last word. This view pervades one set of interpretations of the key subissues of interdependence.

Interdependence is not seen as a reflection of state policies and state choices (the perspective of balance of power theory), but as the result of elements beyond the control of any state or a system created by states.

This perspective is profoundly misleading. It may explain developments within a particular economic structure, but it cannot explain the structure itself.¹³

In addition to the objections of the state-centric school, economic interdependence is debated, even called a "myth," because the statistical evidence for it is unconvincing. Changes in measures of trade flows, ratio of trade to GNPs, and price sensitivity do not offer the dramatic differences from one decade to another to allow a clear conclusion of interdependence.¹⁴

But the objections on grounds of both political and economic models seem more a quibbling about methodology than convincing argument that interdependence is a nonevent. Moderate proponents of the interdependence school suggest not that balance of power models should be discarded but only supplemented by concepts which balance of power would otherwise poorly explain. Proponents would also argue that interdependence clearly is a concept which transcends economics and cannot be proved or disproved by economic statistics. Indeed, most standard measures of a country's involvement in external trade can only begin to help to explain its degree of dependence; nations such as the United States can be profoundly affected by dramatic change in the price of a commodity (oil) which is a tiny portion of its total economic product.

THE ROLE OF FORCE

The first major subissue of interdependence, and the one most pertinent to the military, is the role of force in an interdependent world. The theoretical presumption behind this issue is that interdependence as a prevalent characteristic of interstate relations is an indicator of the possibility of conflicts, some of which could be violent.

The classic conception of interdependence was that of the Manchester School of Economists who believed that economic intercourse is a force for peace. The logic of their argument is no different now than in the 19th century. An international division of labor, with each nation or territory producing what it does most efficiently, and trading with others for what they produced most efficiently, left everyone better off than were each nation to try to satisfy all of its own wants. The stake each nation had in this system was self-evidently important enough to deter interference with it by wars between nations.

The obvious criticism of this conception is that it assumes a symmetry which did not and cannot exist. All nations in the system do not benefit equally. They are at various stages of industrial development; some are more efficient than others. And, "theorists of interdependence have insufficiently analyzed its negative consequences for the core values and interests of nation-states and their constituent members."¹⁵ In a word, economic efficiency is not always valued higher than other national values, the realization of which have costs in terms of efficiency.

These arguments seem to avoid the issue, necessary as they are as theoretical foundations for ideas about interdependence and conflict. So what if the system is less than perfectly symmetrical and if other interests and values clash with economic efficiency? It does not necessarily follow that interdependence--even to an imperfect degree--is not a force for peace. Nations do have a stake in continued peaceful relations with other states which they depend on as suppliers and consumers.

The critical distinction most often missed in the theoretical relation between economic interdependence, national security, and war or peace is the distinction between deterministic and normative meanings. Nothing about interdependence prevents conflict; it is not analogous to the absence of arms necessary to make war. But much about interdependence leads to inferences that nations "ought not" go to war. Interdependence breeds no iron laws; it appeals to common sense, an appeal with rather limited success in the past.

The views opposed to the Manchester School kind of optimism range from seeing interdependence as an explanation (a cause) of conflict to a benign or incidental characteristic overridden by the more traditional politics of states. Referring to two essays about interdependence and security, Allan Goodman concludes that:

Given the increasing sensitivity (i.e., interdependence) of states to the economic actions of allies as well as adversaries, governments will be beset by mounting domestic pressures which will inevitably require exploiting the vulnerabilities of others. The principal implication of this finding for national security is that such sensitivities will tend to promote conflict rather than cooperation, especially among allies.¹⁶

A similar view, less entranced with hostile motives, holds that modern governments do and are expected to look after the welfare of their citizens, probably more than ever. (The similarity with Bowie's earlier comments should not be missed--here, of course, the implication is conflict.)

Governments attending to welfare goals tend to look upon other actors in the international system as possible partners of benefactors, or

as possible threats to their attainment of domestic ends. But in contrast to traditional international politics, partnership, beneficence, and threat are more likely to be conceived, perceived, and evaluated economically rather than militarily. Therefore, a more salient, more vital politics of international economics seems a major dimension of the substance of international politics in the 1970's. The issues in this new politics [are] employment, stability, and food, rather than . . . territory, power, and glory.¹⁷

These assertions are impressive but, in interdependence, scholars find cause for expecting provocation and reason for cooperation, but no predictive cause-effect propositions directly linking economic interdependence with the probability of war. Governments must and will decide on the basis of the sum of their interests whether organized violence is necessary--a political act--and those decisions can be at best informed, not determined, by economic interests.

Looking for meaning for policy issues in this inconclusive review still is a worthwhile undertaking. Economic interdependence may or may not intensify in the coming decades, but the evidence, however sparse, also gives little reason to expect any dramatic reversion from reasonably open markets to economic nationalism, where the reasons for conflict might be clearer. So, assuming a continuation of interdependence as the most descriptive label for international economic relations in the next two decades, the following inferences about the role of force are offered:

1. Nations which continue to cooperate with and in an interdependent system will be vulnerable to political and economic instability in other nations and in the system. They will also be

vulnerable to deliberate coercive economic policies in some areas of trade and finance, depending on the structure of the vulnerable nation's economy.

2. The economic power to do harm is unevenly distributed throughout the world's economies. The United States is the only country whose power in production, consumption, and finance is great enough to threaten the entire system's stability.

3. The potential to do harm is then likely to continue to exist both because of vulnerability and specific advantages coincident in an international, interdependent system. The role of force could well be dependent on whether other choices are available to a victimized nation when economic power is used coercively against it. Economic retaliation is unlikely to be a means available to most nations because of asymmetries in the world economy.

4. However (although not covered in this analysis) the post-WW II record of international violence does not include major aggressions stimulated by economic coercion. Nations have chosen means other than military force to react to hostile economic policies such as the 1973 OPEC actions. If this propensity for nonviolent reactions continues in the future, a plausible expectation is that victimized nations will choose to reduce their vulnerability to interdependence with protectionist policies and, to the degree they are able, by organizing insular, self-independent economies.

HUMAN RIGHTS

In the context of interdependence, the policy--human rights--and the phenomenon--interdependence, are related. The openness of

interdependent nations to communications and many other transmitters of culture as well as trade tends to make domestic concerns matters of everybody's knowledge, if not everybody's business. The exemplary influence of automobiles, televisions, and other modern conveniences has its analogy in how people get along with their governments. Rising expectations include intangibles such as civil rights, political rights, and other individual freedoms. "The open society in America forces the rest of the Western World to increase its own openness."¹⁸ By exposing the Lockheed scandal and Watergate, "the fall of Richard Nixon was structurally related to the fall of Prince Bernhard of the Netherlands and to the disgrace of former Premier Tanaka of Japan."¹⁹ Rather melodramatic, but the point is clear. One could say that the modern system of interdependence related to human rights might have begun with Captain Cook and the missionaries who followed him to "civilize" natives and introduce venereal disease. Even today, such contact is probably seen as a mixed blessing.

What this means is that when the currently popular human rights issue is stripped of its moral versus pragmatic tones, it is reasonably certain that nations do affect one another, sometimes dramatically. The issue is not whether nations must choose to affect others. When the United States and other advanced nations make loans, grant aid, and give economic assistance in any manner to developing nations, they are, wittingly or not, participating in the transformation of cultures (or assisting in retarding such transformations). The American human

rights policy issue is about whether or to what extent we should explicitly tie economic, political, and security assistance to human rights standards to try to affect other nations which are being affected by those relations anyway.

As American human rights policy has developed since the beginnings of the Carter Administration, national security takes priority when it conflicts with human rights demands.²⁰ But the evidence is scanty that consequences good and bad for national security have devolved from US human rights policies. The Latin American nations which recoiled in indignation at the American suggestion that they were honoring civil and political rights only in their breach are balanced by suggestions that a nonpolicy on rights in the Colonel's Greece and the Shah's Iran left a residue of anti-American feeling about what seemed to those two countries as the condoning by the United States of the practices of the deposed regimes.²¹ In other words, indifference about human rights has no better record for national security in those cases than an activist human rights policy might have in other cases. To be sure, this observation is tentative; case studies will undoubtedly appear in academic journals and some cause-effect points may come clear.

One instance of special interest is the Union of South Africa and the efforts of the US Government and private firms to improve the economic and, indirectly, the political conditions of Blacks. Not surprisingly, opposing arguments are made with equal fervor that a US firm staying in South Africa, or leaving South Africa, helps Black citizens.²²

Do human rights policies, in the context of interdependence, have implications for national security and the missions of the US military in the future? Judging by today's commitments it would seem to be the case that they do. With exceptions, the strongest US security commitments are to allies with populations who have personal, economic, and political rights closest to our own. This is not a moral judgment. It is a search for a predictive base. Is the human rights character of any given country an indication of (1) whether the United States would intervene militarily to protect it from external aggression or intervene to support its government in civil war? (2) whether such an intervention policy, and an actual intervention, would be supported by the American public? Before the Vietnam years we might not have asked those questions; now, we would be foolish not to ask.

A contrary expectation is that the human rights emphasis will wane, that it can be linked to a specific US administration whose passing will be sufficient reason to adopt a policy of benign neglect, and that the human rights years were an exodus, of sorts, into the peculiar American penchant for moralizing in foreign affairs. Realpolitik will win out again as the guiding force in American foreign policy.

But until the human rights emphasis runs its course, American interventions might seem more probable when the troubled ally has, or is making progress towards, civil and political freedoms familiar in

the West. Interdependence clouds this expectation with complications that come down from other interests the United States could have in a threatened nation whose human rights record is poor. What might be concluded is that, other things equal, US willingness to intervene would be stronger the better the record of human rights in the nation that needs our help.

MATERIALS

The issue of raw materials availability centers on the vulnerability of industrialized nations to withheld or blocked imports of selected materials from exporters in the Third World. Various views on the issue are well covered in recent literature. The bald US quantity demanded of external supplies, some of which must come entirely from other nations, suggests vulnerability. The opposing position is that a closer look at each item in detail and at alternatives to its denial suggests no notable vulnerability.

But, as Goeffrey Kemp argues,

Regardless of whose predictions turn out to be more accurate . . . the emerging environment will change some of our basic perceptions relating to the role of force.²³

Three issues are most pertinent when focusing on the strategic elements of resources.

First, to what extent may competition for oil, food, and minerals add to the potential for violent conflict in the world? Second, what is the likely impact of resource scarcity . . . on the military requirements and operational effectiveness of the major military powers? And third, what are the long-term strategic implications of likely efforts by

nations to develop alternative resources and technologies to complement and reduce their current set of dependencies?²⁴

The first question directs attention to specific potential reasons for the use of force in an interdependent world, graphically illustrating the general questions raised earlier. Kemp suggests something of a predictive base.

In judging . . . potential for escalation into military conflict, the state of political relations between competitors for all resources is all-important [in referring to oil-related disputes]: where they are good (e.g., Britain, Norway, France), disputes have been resolved; where the competitors will not even speak to each other for other reasons (e.g., Taiwan and China, Greece and Turkey), oil as a catalyst for war becomes more likely.²⁵

This commonsensical insight places interdependence and conflict over materials in a different light than a deterministic perception of economic relations as a precondition for conflict or cooperation. The perception is a marriage of the new transnational relations model and the state-centric model of international politics and conflict. In an interdependent world economic resources probably can and will provide ample reason for violent conflict but will not be a sufficient cause. To see something closer to a fuller consideration of conflict potential over resources (and encompassing Kemp's first and second questions), we can paraphrase a deterrence litany used by Herman Kahn and others: which resources can be denied, by what means, against which possible counteractions, by whom would they be denied, and what are his objectives?

Political, military, economic, and scenario-specific questions such as these are necessary to analyze the need for force in relation to the possible denied supply of critical resources, rather than broad generalizations about interdependence and conflict.

Finally, Kemp's last question bears on an earlier question about the degree to which nations will choose to participate in open markets. As suggested earlier, trends are in the direction of protectionism but hardly represent movements which would transform the international economy soon to something other than interdependence. "Reducing current dependencies" is then a process most likely to involve only selected material dependencies and such policies could have interesting political implications when the alternative chosen is another source of supply of the same commodity. For example, it could mean even closer political alignments among the developed nations and a corresponding clearer division between rich and poor nations.

A countervailing position on the issue of resources and conflict would stress the increasing demand for oil and other scarce resources in the West and the increasing vulnerability of supplies to interruption or denial at the source. But, to expect resource conflicts, it is not enough to point to the dependencies of the American economy which is, unlike most other economies, able to weather most short-term disturbances in access to resources. Also impinging on US interests are threats to suppliers from third parties when US forces might be directed to intervene to defend the threatened trading partner. Consequently, this opposing view, while giving more weight to US

materials vulnerabilities, still does not propose direct retaliation against a source country, but it can propose that acts of war--third party denial—are cause for US military intervention.

In the first position, then, resources can be a catalyst for violent conflict when political relations between resource competitors are bad, and in the second position, resource dependencies are *prima facie* causes of war but with emphasis on indirect threats to US interests. Either position suggests a continuing need for US intervention forces in the coming decades. Coercive countermeasures other than military force may at times be appropriate but would not at all times have the flexibility of military force. For example, the offending nation(s) might have little economic dependence on the United States; the US-imposed sanction might take too long to have its intended effect; or, the interests of close allies might be harmed by US economic warfare actions. Military intervention is not a suggested course of action, but it will be a choice worth having when "in-kind" responses won't work.

NORTH-SOUTH, RICH-POOR

Negotiations in Paris, Nairobi, and New York have wavered between confrontation and compromise and appear to be making only very slow progress. While the North will consider only marginal adjustments, the South insists on far-reaching modifications of present international economic arrangements The South speaks of The New International Economic Order; the North refers to it, typically, as A New International Economic Order.²⁷

For the South--the "Third World"--the new order is to be the "transformation of the international division of labor and the terms of trade and investment in a manner which will bring about a massive redistribution of world wealth."²⁸ The nations of the South prefer, or are accused of preferring, socialist economies and a global redistributive economy to open markets and competition. And they can, with no little justification, accuse the developed nations of practicing some of the same protectionist, nonmarket policies.²⁹

An important development about which there is no argument is that the poorer nations are dissatisfied with the current international economic system of relatively open market interdependence. The Rich-Poor issue in the context of interdependence is about the course this dissatisfaction could take--either compromise and reluctant cooperation, or confrontation and alienation.

Their [the poor nations'] demands include less of the protectionism by which rich nations block them from selling their relatively cheap manufactured goods; an international "common fund" for commodities to protect the prices of their raw materials from erratic fluctuations; more financial assistance for their development and fewer obligations for paying it back³⁰

The developed nations, on the other hand, have a "sense of the obligations in justice that rich people owe to poor people."³¹ Yet the poor countries were left out of the recently concluded Tokyo round of trade negotiations and the participants were accused of having reached "an agreement among themselves that hurt more than it helps the poor."³²

The poor countries' disillusion could lead, as one argument would have it, to a North-South conflict. The South's weapons would be its raw materials in demand in the industrialized North, the formation of commodity cartels, trading blocs, and, generally, strength in numbers to contest the strength in wealth of the North. The South's preferred goal is not, however, two economic worlds in constant conflict, but rather an economic order suited to their aspirations. "The essence of their demands is a global redistributive economy to replace the present market exchange system."³³

But if this increasing "politicization of international economic relations" comes about, carried to its "logical extreme," it would mean the transformation of all economies into mobilization economies "organized for economic conflict."³⁴ In effect, the poor would not get the new cooperative order they desire but a system of constant conflict and a reversion to Merchantilism at best or an economic war of all against all at worst.

Against this view is another. "The notion that a new international class conflict could determine developments in the international political economy during the years ahead is based on two questionable political assumptions."³⁵ The first is that "bloc" conflict presumes a degree of international order and an ability to organize for cooperative coercion which is lacking today. The "success" of OPEC in 1973 is an illusion which cannot be repeated by other nations with other materials. They have different balance of payments objectives, growth potentials, export dependencies, and the

like. The image of bloc politics is "deceptively simple and misleading."³⁶

The second questionable presumption is about how the current disorder in the world economy originated. It did not start with the oil embargo of 1973 but dates back to the mid-sixties and the growing strains in the international monetary system. These strains were, in turn, the product of the redistribution of economic power after WW II, with the growth of the United States, the European economies, and Japan in particular.³⁷

So we have in this contrary view not so much a rebuttal to the idea that the world economy may be closing fast on crisis as it is an argument against how serious the crisis could become because of the manipulations of the dissatisfied nations. As most wars are limited because of the belligerents' limited means, economic conflict might also be limited in scope and depth unless the alienated nations find a formula for concerted action.

INTERDEPENDENCE AND ITS DISCONTENTS

This essay was by no means intended to cover all the ramifications of interdependence. For example, the Communist nations, still largely outside of the interdependent world economy, might elect to become more open to international commerce. If political motives and objectives are assumed, exploitation by the Soviet Union of discontent with the open market system might be essayed at some length. But how, other than by acts of war, the Soviets could upset the system is an open question. A presumption of being able to disrupt an interdependent

system is first that the disruptor is part of it, and, when part of it to any significant degree, a nation also shares the vulnerabilities that go with participation.

Also ignored are multinational corporations and their effects on home and host country economies, international economic agencies, fishing in international waters, and, indeed, many other activities which bring the peoples and the interests of nations together and constitute much of the substance of interdependence. Interdependence is a psychological and cultural concept perhaps even more than it is an economic phenomenon precisely defined. What is important to a nation in its dealings with others is what it sees as important, whether it is a commodity or an ideology. The Cod War could not have been the Cod War if the people of Iceland and Britain did not have longstanding, culturally unassimilable tastes for fish.³⁸

The most critical issue associated with interdependence is whether it will change into a world of economies organized for economic conflict and controlled by national security anxieties. The observation of this study is that this "negative" movement is underway, gaining momentum, but unlikely to be fulfilled to such drastic lengths in this century. There is still time to (1) try to reverse the trend, (2) try to modify its more adverse effects through compromise and cooperation, and (3) prepare for those adverse effects that cannot be avoided.

The latter parts of this observation imply a value judgment; that is, that interdependence is "good" and economic nationalism is bad.

This judgment is a reflection of US national policy as it has been since WW II. Indeed, the United States is the principal proponent of interdependence in the sense of an open market system. We must allow, however, for the possibility that the United States might also wish a change away from economic liberalism, and allow for the possibility that change will come even if it is against the desires of the United States.

These observations do not mean that interdependence is ending. It does mean that its nature is changing. It is becoming less characterized by liberalism and more by state interests. This is another way of saying that international economic relations are becoming more political, that the market system which accounts for today's brand of interdependence is giving way more and more to governmental manipulation.

The change is not universally lamented. The beautiful balance and symmetry of the classical vision of free trade was never really balanced and symmetrical. The developing nations' call for a new economic order is a call for an end to the dominance of free and open markets and the large, efficient economies served best by those markets. It is quite unnecessary to see their point in Marxism; Hamiltonian America could be their model.

What does interdependence and its trends imply for the potential role of military forces? Essentially, interdependence in its changing character suggests a need for nations to cooperate, an obvious normative reflection of a system that does not work by some invisible

hand. This refers to political cooperation--implying a need to choose and to reflect a people's or an elite's values in that choosing, a process that is not at all likely to yield compatibility of economic policies and a smooth running economic system. Conflict and confrontation seem quite likely, but will they require military force for their resolution? Currently, there is no threat to the United States that can be projected other than the apparently constant possibility of the loss of Middle East oil. That is, from the nature of interdependence itself, it does not follow that the United States would have to intervene with military force to secure an economic interest. Such decisions are contextual--in the concerns and circumstances at the time of crisis. Specific case studies of areas, resources, and US dependencies are needed to understand the seriousness of economic disturbances.

CONCLUSIONS

1. A future policy issue for the United States is the degree to which it wants to encourage a liberal international economic order and thereby encourage the greatest degree of interdependence. The policy direction taken will have political and economic costs and benefits, but we are interested in the role of force. Interdependence offers no easy, plausible deductions that its presence or absence as an economic system leads to more or less violent conflict among nations. But if the course of interdependence continues in the direction of nationalism, protectionism, and regional and national insularity, economic relations will become more and more politicized

and such international economic fluctuations as do occur can be interpreted as threats to a nation's security rather than the expected costs of an open system.

2. There is no "natural" foundation for economic interdependence; it was more or less imposed on the world by dominant economic powers whose power today is waning relative to new centers of post-WW II economic influence.

3. Interdependence is unlikely to change to some other system short of a trial period of a decade or two of incremental adjustment and change. While it remains, it will be a normative argument for peace rather than a "systemic" obstacle to war. Nations can and may go to war for any number of reasons; interdependence is only one of several reasons not to.

4. Even theorists who see conflict growing from economic interdependence see its form as economic rather than military.

5. While a high degree of interdependence lasts, nations will be vulnerable to economic coercion. But the power to do harm to others is spreading thinner and few nations have the power to affect others or affect the entire system. Within this standoff are particular asymmetries, primarily in oil production and its demand, which can be exploited by the producing nations.

6. In the area of interdependence and human rights, the more successful a human rights policy is in encouraging greater civil and political freedom in many nations of the Third World, the more likely the United States would choose to intervene militarily in their behalf

when their political independence is threatened or their economic health is attacked by other nations. This is, of course, an "other things equal" conclusion sensitive to the many other considerations an intervention decision would include.

7. Violent conflict because of raw materials competition will probably depend on the political relations between the disputants. Political antagonists might resort to war. Political friends will find peaceful means to settle the dispute or at least severely limit escalation of a conflict.

8. US military interventions because of materials denial are likely to be a reaction to coercion by third parties against friendly nations where the United States has interests to maintain. Consequently, forecasts of this role for military force will rest primarily on expected political alignments and interests rather than on direct US economic vulnerabilities.

9. Great differences in the level of economic development, domestic economic objectives, ideology, and culture between the industrialized North and the developing South will continue to explain the latter's dissatisfaction with the world economic order and the South's insistence on dramatic change to a new order. But the poor nations' inability to organize effective blocs and cartels will limit their means of persuasion to peaceful methods.

CHAPTER 3

METHODOLOGICAL CONCLUSIONS AND COMMENTS

The discussion in this chapter refers to the approach and method taken in the study of interdependence (Chapter 2). The chapter also contains additional discussion of forecasting methodology stimulated by the research that went into developing the essay on interdependence.

It should be understood--and indeed it is probably obvious in the conclusions to Chapter 2--that this application of the issues approach was descriptive, not prescriptive. Studies for the Army are frequently undertaken, not surprisingly, to make recommendations about decisions and actions--that is, the studies are prescriptive. In exploring futures issues, however, the issues approach emphasizes that the problems should first be understood at least well enough to describe them. Ordinarily, description would be the first of two phases of a strategic study, followed by prescription. This was not done here; the reasons are given in the conclusions that follow.

1. Studies at a conceptual level, such as the essay on interdependence, are probably too far removed from specific conflict situation analyses to permit drawing clear conclusions about if, when, and how the Army might fight in the future. But it is not at all clear that case studies of specific countries and areas of potential conflict would, alone, lead to useful conclusions about the long-range future. As a rule, conflict studies incorporate case studies and also aggregate analyses, the latter identifying such things as frequencies, critical variables, and the like. Yet, how comfortable can one feel with a

prediction, or forecast, that the United States might intervene in conflict in any given spot in the world in the next two decades? Conceptual studies, even though they lack the rigor and systematic analyses of case/aggregate studies, are more likely to grapple with the values at stake and, what might be the same thing, emphasize the great uncertainty that seems to attend decisions to use military force. In other words, conceptual studies do have a place, perhaps as a prelude to more conventional approaches, perhaps as a modifying caution on the sense of determinism of systematic studies. Most importantly for futures studies, conceptual studies might be most appropriate as ways to grapple with the most hazy futures issues, try to give them some form, and establish a base for more systematic methods.

2. Conceptual studies with an issues approach can probably deal well with strategic suppositions because the latter are generalizations which apply to the theoretical and conceptual level of observation. Placing problems into the form of issues almost forces the analyst to question suppositions. For example, a supposition that the United States is vulnerable to denial of foreign material A may be true, depending on the criterion of vulnerability used. But it does not follow that the United States is vulnerable to all import of materials as a generality, a conclusion that could be drawn too hastily from a review of one or a few critical materials. (Case studies would ordinarily be the vehicle to test a supposition, but if disproved, then the supposition would only be true for that one case and, even then, may or may not be true for the future. A conceptual study does not necessarily

"test" assumptions and propositions so much as ask what vulnerability to resource denial is all about in the first place.)

3. The method of seeing possible developments as issues does seem to lend itself to deducing new or otherwise unforeseen forecasts, but the success of these deductions depends greatly on the skill of the analyst as opposed to something the method itself yields. It is not false modesty to suggest that probably more could have been gotten from the essay on interdependence than had been noted. Perhaps users of an issue approach could themselves see more meaning in an analysis than the analyst.

Finally, the issues approach is difficult to handle because international affairs are complicated and complex. Clear and precise opposing views on a development are a fiction of debates where to win an argument is more important than to understand it. By the same token, the approach meets one criterion of forecasts noted in Chapter 1--that it should be multidimensional, and therefore more realistic about the complexity of conditions. This quality of the approach is a corollary to the doctrine that all method is first a way to reduce or eliminate bias. By forcing the analyst to think in terms of opposing views, even the unconscious subtleties of ideology, prejudice, and ignorance are open to view.

The most important methodological reflection to come out of this exercise is recognition of the nagging absence of theory. If A leads to B, and it is B in which we are interested, we would surely want to search for the A's in the future. But, in spite of much admirable work

being done in theory--specifically, the theories of conflict and war--we seem to be still in much doubt about which A's to look for.

Getting to the distant future is hard enough, but theory does not even give us confidence in forecasting tomorrow's conflicts. If this is true, it could be because theory is absent or weak, or because the analyst is ignorant of it. It would take continuous and dedicated attention to theory to keep up on it, a task that is not a hallmark of government research organizations. This refers, to be clear, not to "futures" methods, but rather to social science, political science, and international relations theory. There is no magic in futures methodology which can overcome the problems of theory in the social sciences.

The theory of conflict is a multidisciplinary enterprise from which we should like to have a serviceable general theory in which precedent conditions of conflict are reduced to their minimum number while still being able to tell us something even when their precise values cannot be known. To go far out--to twenty years and beyond--and to be precise is a contradiction. We should not expect to know the probabilities of conflicts, only their rough potential.

ANNEX TO CHAPTER 3

MILITARY INTERVENTION

Intervention is the logical subject to address after having posed as the object of research those developments which raise a question of policy and which could include a decision to use military force to resolve a problem (Chapter 1). Intervention is

. . . an active, calculated step, a forcible interference in another nation's external and internal affairs, to maintain or alter a condition or situation, presuming, further, that this coercion will in some measure benefit or protect the initiator.¹

Intervention in its most comprehensive sense includes all means of influence, from the most subtle and diplomatic activities to dramatic deployments of military force. Here, we are interested only in military intervention which could be, and probably would be in most instances, a move taken when other means fail to achieve the intervener's objectives.

Military engagements ✓ during intervention can range from guerrilla tactics to conventional battles between professionals with the most sophisticated equipment. . . .²

The methodological difficulties of forecasting interventions can be divided into two aspects of intervention decisions:

1. The first is the intervention situation--that is, the development, event, crisis in some foreign nation which would raise a decision for US policymakers about whether to intervene. This aspect is "researchable" but, as noted in Chapter 3, we must question whether we have adequate theories of conflict to know what to look for. But, compared to the other half of the problem, intervention situations

might have qualities which are independent of decisionmaking. This means that some theories of violence and conflict which are tied to the pace and level of social change, for example, might be more reliable than having to deal with the vagaries of individuals and their decisions.

2. The second aspect of forecasting intervention is the intervention decision as it is made in the United States contemporary with future intervention situations. This patently unpredictable variable might at least be broken down into more manageable parts, principal of which would be an attempt to forecast US interests around the world. The working assumption could be that the greater the interest, the more likely a decision to intervene.

It is just as important to recognize those aspects of intervention forecasts which are not critical, however important they might be today. The most influential of these for contemporary decisions is the posture of US forces. The working assumption usually is that the more appropriate forces are in size and structure and in their ability to deploy, the more likely the decision to intervene, other things equal. However, for the very long range, there is little point in trying to guess at posture as a determining variable in intervention decisions. Rather, we are, in effect, more interested in looking at demands that might be made on military forces which will largely determine posture.

Posture, and structure, are the objects of the forecast effort--the dependent variables--as long as we are dealing with a future far enough ahead to allow time to plan and to change.

Consequently, the most fruitful avenue of forecasting for possible roles for military, specifically land combat, forces is toward intervention situations. Even then, the state of theory might be lamentable, but at least we know what we need the theory for.

The earlier definition of intervention focused on the intervener's actions and is not a good guide for future intervention situation forecasting. It is true and inevitable that intervention situations must be defined from the intervener's point of view, however, because it is impossible not to impute values and interests to the potential intervener. But this focus tells us nothing about how an intervention situation "looks." The fact that a government is threatened, falling, or has fallen to either outside or internal pressures can be an "objective" observation; that some nation will intervene cannot be objective; the expectation must presume some motive and interest in the intervener's perception. We should, then, be interested in objective conditions to the extent that theory, however incomplete, can identify them.

In order to forecast the intervention situation, we should want to know those causes which can be noticed before the event. This would not tell us about the dynamics of change but it would identify potential revolutions, which is a reasonable and modest aspiration for forecasting.

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4. Gilpin, op. cit., p. 19.
5. Ibid., p. 20.
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7. See Ernest H. Preeg, "Economic Blocs and US Foreign Policy," International Organization, Spring 1974, pp. 233-246.
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APPENDIX
SPECULATIONS

One gentle criticism of current forecasting methods implied in Chapter 1 of this report was that forecasting anything is so difficult to do and to have accepted by others that we tend to stay with the more solidly based material. And, it was further noted, by doing so we risk dullness and irrelevance. In this appendix, we will risk not only irrelevance and dullness but also implausibility. But the risk will be a conscious one, with a purpose. The idea here takes its cue from Milburn's criteria of a good forecast which include allowing for "complexity, quantity, problems . . . and employ 'glimmers' of possible innovations. . . ." Complete, well-rounded statements of issues are not to be expected; rather, the aim is to develop speculations on things to come which might be interesting enough to follow up to see if indeed they take some identifiable form.

The scheme used here will consist of a statement about the speculative issue; an attempt to list some of the inferences which can be drawn from the issue, especially inferences for conflict; and, finally, an argument against the thesis or the inferences, in keeping with an "issues" approach to forecasting. The issues are unevenly described. Some are discussed in more than a little detail and some have only the barest outlines to commend them. The criteria for inclusion of an issue are that it should either be something we do not now find often in the literature, or the issue, as described, should take a different angle on a problem that may very well be found in the literature of futures research.

CULTURAL REVOLUTION

1. The protests around us, or in which we might even participate, and those in many countries of the world seem to have a definite modern history whose meaning is different from older forms of "revolution." Organized demonstrations protesting government, social, and industrial policies range in character from the freedom marches for racial equality to protests against nuclear power, the Concorde (SST), and the American presence in Vietnam. The Vietnam phase of this recent history might have clouded American vision, many of us having seen it as the specific product of the war rather than an American manifestation of a general movement of "cultural protest" common throughout the developed nations. In 1968, student protests in France reverberated through West Europe and could not be explained by the US involvement in a war.

The point is that listing the various protests and their ostensible causes would show a variety of form and purpose, all adding up to non-violent protest as a popular, indeed legitimate, form of action intended to change aspects of a culture without necessarily changing the form and style of government itself. The phrase, "working within the system," has apparently been taken to heart.

Does making a revolution still mean taking the Hotel de Ville or the Winter Palace? Rather than a seizure of power, revolution tends to become cultural revolution, or at least critical opposition to the 'dominant' culture.¹

Protests take several forms, from nonviolent resistance, simple marches with placards, and symbolic private property violations to expensive full-page ads in The New York Times. The former are the methods of the less affluent and more mobile and the last of the celebrated, rich,

and chair-bound. When one agrees with a cause, its demonstration is, of course, not a "protest." When one disagrees with a cause or with its form of demonstration, it is a "protest." These attitudes are important to recognize but otherwise irrelevant to the point of expected developments.

Finally, it is noteworthy that not all protest is for change; much protest is against change. Some examples of the latter are: the anti-ERA movement in the United States; the fundamentalist (Islamic) religious factions in Afghanistan; the revolution in Iran (to some extent); and, even the "back to the three R's" reaction to "progressive" education.

2. In totalitarian states, protest most often takes other forms, usually violent and clandestine, and is political in content and style--it is aimed at the government and its philosophies rather than at a "way of life" that can be changed without changing the government. The meaning of cultural revolutions for the future of conflict is that some issues might have the potential to grow to mass movements for political change. The interest of strategists is, then, on movements which might be harbingers of political revolution and which would raise intervention decisions for future US policymakers. The instability in today's Iran and Afghanistan is clearly political but with rather profound cultural overtones. Potentially revolutionary states need not be totalitarian, of course, and the scope of research should include all states--those which "allow" cultural protest and those which would probably have cultural protest were it allowed.²

3. We must question whether this presumed development really does have meaning for the future of conflict, and question as well the kind of inferences which should be drawn if the development continues. Cultural protest is most common in economically developed, politically open societies where protest, if it is peaceful, is not only legitimate but often fruitful when demands are reasonable. The potential for violence and political revolution is then least likely, it seems, where protest is most prominent. The phenomenon which might still hold the interest of strategists is, however, that cultural protest on the scale and scope of current practice is relatively new, it is carried on in societies so complex that we do not understand the dynamics of change, and it is still too early to tell how the story of this movement comes out. On balance, cultural protest does not offer much in the way of forecasting conflict on its face, but we still know so little that a modest approach is best. A research task could be to study those protests over those issues which hold some promise as potential political movements which cannot easily be accommodated even in democratic, pluralistic societies.

AN INDEPENDENT WESTERN EUROPE

1. Years of talk and speculation about, and little progress toward, a unified Western Europe independent of the United States in foreign and security policies, have tended to deaden interest in this possibility. But political unity is unnecessary for an independent defense community and a common foreign policy toward the Soviet Union and Eastern Europe. A loose federation, or even a Europe of independent

nations, could adopt common defense arrangement, possibly even as an incentive to political unification.

Is it possible that by 2000 the US military presence in Western Europe will no longer be welcome or required? Or, less drastically, is it possible that the US role in the Alliance will be no more influential than that of Belgium today, or of Canada?

The reasons for the possibility are those interests of Europeans which differ from the American and the interdependence of foreign, defense, and domestic policies in the modern world. Additionally, one of the greater obstacles to integration--the earlier absence of democratic governments in southern Europe--is being overcome and can be a nonissue by 2000. The questionable value over the long run of the US strategic nuclear deterrent, and the economic potential of the European community to develop its own defensive forces, are also arguments in favor of the possible development.

2. The implications of an independent Western Europe are profound for the United States, both politically and militarily. Europe has already exerted itself as an economic force and is now emerging as a political force in world politics and is developing its own outlook on world politics. At the least, linkage politics--the ties between defense, political, and economic policies--would no longer be an "option" for the United States in dealing with Europe. Possibly because European interests are and will be similar to but different in important respects from those of the United States, Europe could be a greater source of tension and conflict than outright adversaries. More specifically, the effects on US military planning

and strategy will be far-reaching. The United States should have no less an interest in a free West Europe, and it is difficult to imagine that we would not play a military role in deterring war against NATO Europe or fighting in a war that might occur. We might expect, then, to have to plan to participate in European deterrence and defense with, possibly, no forward-deployed forces; without the dominant voice in nuclear decision-making; without the obligation of placing US strategic nuclear forces into the scheme of strategy; and, without US participation in a "forward defense." In a word, the NATO strategy, especially the US role in it, will be decidedly different from today.

Could the US Army justify current manpower, divisions, and budget levels in the future without a US presence in Europe? Possibly yes, if decisionmakers truly believe that European-earmarked divisions could intervene in a European war in time to influence its outcome. But this is a planning problem, partly subject to the technology of the next twenty years, and not a subject for forecasts. Retaining current force levels without a European presence would, however, be an interesting political exercise, what with "experts" in and out of uniform holding the view that NATO could not successfully defend even today against a determined Soviet attack. What would make anyone believe it could do so in that different future?

3. Any serious thought of a unified Western Europe usually causes a rash of citations of obstacles. The political intransigence of France, the need for West Germany to have its own nuclear weapons, domination by the three or four larger central states of the smaller states, Greek-Turkish animosity, the strength of Communist parties in some West European

states, and the threat to cultural diversity are examples of demurrs to the unification argument. And, it should be added, if there is an American role that helps shape the character of NATO Europe in its internal relations and in its relations with the East, who will play this role in America's absence? Must it be played in the future? (The "role," in brief, is as leader, initiator, and, to the Soviets, guarantor of stability and rationality. The latter qualities are less a reflection of European predilections and more a reflection of Soviet suspicions, however unfounded.)

A research task could be to assess the chances of an independent West European security community by 2000, with emphasis not only on whether it could be done but also on how--in what possible forms, with which attending problems, and with which implications for US security.

LIMITS TO GROWTH

1. No-growth, slow-growth, small is beautiful, and limits to growth are phrase variations on the theme of a clash of values with technology and its social products. An aspect of cultural revolution, this movement is confined to the most developed nations.

Economists have long dealt with the "external costs" of producing desired products and services. These social costs of technology and efficiency are more and more called into question as exceeding immediate benefits. The costs of past benefits have often been remedied through government--today's society still pays for deep-mined coal of the 30's and 40's through black-lung benefits to retired miners. In this way, the issue overlaps in the United States with the problems associated with a

welfare state. It is at least a paradox to argue for free and unregulated capitalist expansion and against these remedial aspects of a welfare state.

The small is beautiful school, especially, and other factions of the movement to some extent, imply a need for contemporary self-restraint and regulated restraint to lessen the future costs of today's economic activity. Limiting the size of a firm in spite of opportunities in the marketplace to expand it is decidedly "artificial" in standard economic theoretical terms, but such decisions are in the spirit of the movement. This, broadly, is the core of the movement in conventional thinking--that it goes against the grain of a self-regulated market, and it requires not only the doing of things differently but also requires thinking differently.

2. Inferences for conflict (not necessarily violent conflict) have the same bases in the movement as the inferences that can be drawn of its paradoxes. Probably, government, especially federal government, must impose and enforce measures to make such a change effective. Theoretically, local decisions to limit plant capacities and impose environmental safety restrictions drive firms out of an area into another where these restrictions are not present. The effect would be, then, that local initiatives would cost the area jobs, income, and tax sources. But, by making restrictions apply nationally, the incentive to relocate is lost and all firms would operate under similar restrictions. The social "cost" of the movement seems then to be greater governmental control and potential "backlash" in the form of "reform" platforms in democratic states. Were the movement to be strong enough, the result could be party divisions along ideological lines and nations at odds within themselves.

3. Two arguments can be made against the limited growth movement.

The first is that it is selfish in terms of overlooking people throughout the world who can still benefit from economic growth in their own countries and benefit from the "external benefits" afforded to them from other nations (for example, in more efficient agricultural methods). The second argument is that limits do not solve the more basic social problems any more than advances in technology would solve them. Herman Kahn is vituperative at times about it:

Various social-limits-to-growth movements remain the biggest obstacle to progress. Many of these limits are encouraged by what I call the 'health-and-safety fascists'--the people who are almost religiously antitechnological, self-righteously superior in their judgments.³

With attitudes like that, the "movement" hardly has clear sailing.

It may be worth investigating at least the outlines of the form that could be taken by a society transformed by a serious limits-to-growth policy. What exceptions would be made? Would military production be exempt? How much more would military equipment cost? If a serious movement forced the United States to adopt different social priorities, how would national security rank among other values?

OTHER ISSUES

Energy:

The complete conversion of one gram of mass into energy . . . releases . . . 9×10^{20} ergs, which is the equivalent of the explosion of roughly a thousand tons of TNT. Thus enormous energy resources are contained in tiny amounts of matter, if only we knew how to extract the energy. . . . A thermonuclear weapon, a hydrogen bomb, is capable of extracting less than one percent of MC^2 from a Mass M of hydrogen.⁴

If necessity--or pressure--is the mother of invention, the time when such more efficient extractions of energy from abundant and available elements might be nearer than otherwise expected. Perhaps no other scientific breakthrough could transform the Western World's preoccupations in 2000 compared to today than an energy glut.

The End of Imperial Zones:

The end of the "old" imperialism of the European states was followed, after World War II, by "imperial zones." Much of the world was either West and free or East and Communist-controlled. This system of protectorates and allies has failed, is failing, and, by some accounts, will continue to fail. Its end will create new international tensions, especially in Latin America and in Eastern Europe. These two regions have been most closely associated with the two superpowers in the sense of a hands-off attitude. But changes to the latent and real protectorate-domination relationship have come internally. The Soviets face a Yugoslav succession problem, apostasy in Rumania, and discontent in Poland; the United States has lost influence in Cuba, Chile, Argentina, and Peru.

Certainly, from an American point of view, the comparison of Soviet domination of East Europe with US influence in Latin America is insidious. But that is hardly the point. Rather, the tacit understanding that certain regions were the province of one superpower, to be honored by the other, amounted to a kind of stability. Once failing, the "system" then "opens up" to greater uncertainty and, possibly, instability. How each superpower acts during crises or upheavals in the two regions will characterize the future of conflict to some large extent.

A Strategy Crisis in NATO:

The NATO flexible response strategic concept has been strongly criticized since its adoption in 1968 and is unlikely to survive another twenty years of discontent. A change in concept and supporting structure will cause a "crisis" because of logical inconsistencies and the effects on the US role in European defense. Although it is unlikely that current members would elect to disassociate themselves from the Alliance, the role taken by some in the new scheme could be a token one at best and the political cohesion of the Alliance would be weakened.

The logical inconsistencies can be seen today. Strategy critics in the United States hold that we place too much emphasis on NATO Europe at the cost of less attention to and readiness for other areas of potential conflict. The questionable assumption implied in this view is that potential for war in Europe would be equally as small were US military forces less oriented to Europe. Within NATO Europe, critics hold that Alliance defenses are too much oriented to large-scale attack in the central region when conflict is more likely on the flanks and the periphery of NATO, generally. But, if flexible response, which conceptually provides for this variety of threat, is replaced by a more rigid strategy with a nuclear emphasis, it is difficult to see how the variety of threat can be accommodated unless we assume that deterrence cannot fail.

Moves to give the European-based forces their own strategic weapons (land-based missiles capable of reaching the Soviet Union), and the coincident diminished credibility of America's strategic nuclear component of the strategy will have the effect of "de-coupling" the American strategic

nuclear force. This might be intolerable to some of the smaller European members both because of the *prima facie* loss of deterrent strength and because it would place more influence in the hands of the larger European NATO members.

The United States seems to be going through a period of adjustment in its worldwide military strategy. We don't seem to know yet how to arrange our expectations about our own policies about the uses of force. It therefore seems premature to try to find answers in a change to NATO strategy. Would less emphasis on NATO Europe really result in greater capabilities for other US military tasks? If yes, would US intervention policies be influenced by the greater availability of useable forces?

ENDNOTES

Appendix

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2. Lyford P. Edwards, The Natural History of Revolution, 1970, p. 30.
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REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER ACN 79024	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) Forecasting Strategic Issues, 1980-2000		5. TYPE OF REPORT & PERIOD COVERED Special Report
7. AUTHOR(s) Mr. John F. Scott		6. PERFORMING ORG. REPORT NUMBER
8. PERFORMING ORGANIZATION NAME AND ADDRESS Strategic Studies Institute US Army War College Carlisle Barracks, PA 17013		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
11. CONTROLLING OFFICE NAME AND ADDRESS		12. REPORT DATE 10 December 1979
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		13. NUMBER OF PAGES 73
16. DISTRIBUTION STATEMENT (of this Report) Approved for public release; distribution unlimited.		18. SECURITY CLASS. (of this report) UNCLASSIFIED
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		18a. DECLASSIFICATION/DOWNGRADING SCHEDULE
19. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) Forecasting, Strategic Issues, Interdependence, International Economics, Conflict, North-South, Human Rights, Intervention, Energy, NATO Strategy, Cultural Revolution, Method, Methodology.		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) An intermediate range of theory and perception for forecasting conflict is characteristic of international relations. Method is weak or absent. A proposal "issues" approach adapts the technique of argument to explain assumptions and to search for new and unexpected developments. A case study of international interdependence is followed by methodological conclusions. Several summary issues are offered in an Annex and an Appendix as illustrations of further uses of the suggested approach.		